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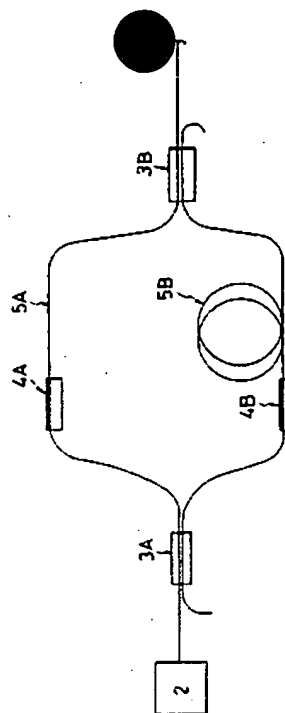
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TITLE : CANCELING DEVICE FOR
POLARIZATION OF OPTICAL FIBER



ABSTRACT : PURPOSE: To easily from a large optical path difference between linearly polarized light beams by separating two linearly polarized light beams intersecting with each other at right angles, transmitting the separated polarized light beams to respective optical fibers having different lengths respectively, polarizing them in prescribed directions, and then synthesizing respective polarized light beams.

CONSTITUTION: A laser light beam radiated from a laser light source 2 is converted into the 1st and 2nd linearly polarized light beams by an optical fiber coupler 3A and then respective linearly polarized light beams are polarized by the 1st and 2nd optical fiber type polarizers 4A, 4B. Both the light beams having different transmission speeds respectively are synthesized by the 2nd optical fiber 3B as non-polarized light through the 1st and 2nd optical fibers 5A, 5B having different optical path lengths respectively. Since the same kind of the optical fibers are used without using optical fibers having different refractive indexes, a large optical path difference can be easily applied to respective linearly polarized light beams, so that light radiated from the light source with long interference enabled wavelength can be converted into non-polarized light by using short optical fibers.

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